<u>REMARKS</u>

This application has been reviewed in light of the Office Action dated July 9, 2004. Claims 1, 13, 17, 29, 58 and 60-65 are presented for examination, of which Claims 1 and 17 are in independent form. Claims 5, 6, 8, 10-12, 14, 15, 21, 22, 24, 26-28, 30-33, 35-57 and 59 have been cancelled without prejudice or disclaimer of subject matter, and will not be mentioned further. Claims 61-65 have been added to provide Applicant with a more complete scope of protection. Claims 1, 13, 17, 29, 58 and 60 have been amended to define Applicant's invention more clearly. Favorable reconsideration is requested.

Of the claims now pending, Claims 1, 13, 17 and 29 were rejected under 35 U.S.C. § 103(a) as being obvious from U.S. Patents 6,324,178 (Lo et al.) And 6,233,611 (Ludtke et al.), taken in combination, and Claims 58 and 60, as being obvious from those two patents taken together with U.S. Patent 6,064,772 (Tanno et al.).

Independent Claim 1 is directed to a communication method of communicating digital information of different data formats through a bridge unit located between at least two communication units able to communicate by at least one of the data formats. The method of Claim 1 comprises a reception operation of receiving digital information having a first format, transmitted via a first communication channel from a communication unit that uses the first format, and a determination operation of determining at least a need to reformat received digital information having the first format according to resources available on a second communication channel. Also performed are a determination operation for determining a bandwidth allocation on the second communication channel in order to provide a minimum service of reformatting the

received digital information, and a reformat operation of reformatting the received digital

information having the first format to digital information having a second format different from

the first format and selected among a plurality of second formats, if a need is determined and if

the allocation of the bandwidth is determined. In a transmission operation, there is transmitted

the digital information having the second format via the second channel.

Thus, among other important features of the method of Claim 1 are

- the need to reformat received digital information is made according to resources available on a second communication channel;

- there is a further step or means of determination for determining a bandwidth allocation on the second communication channel in order to, provide a minimum service of reformatting the received digital information;

- the second format into which the received digital information is reformatted is selected among a plurality of second formats and this reformat operation is performed if a need is determined and if the allocation of the bandwidth is determined; and

- the device is a bridge.

Lo relates to a data transfer method between communication domains of

differing data packets formats and which eliminates the need to copy the data payload section

324 of a received data packet from one memory space to another memory space within a bridge

device coupled between first and second communication domains. In particular, it is mentioned

at col. 8, lines 44-46, and col. 9, lines 10-14 (see also Fig. 5), that when a data packet is to be transferred from a first domain to a second domain, then a new header section 330 of the data packet is constructed within the data packet format of the second communication domain by bridge circuit 220. It is also specified that a new data packet for the second communication domain is assembled with the new header 330 and the unchanged, data payload 324 (col. 9, lines 17-24).

However, the data payload 324 is not reformatted in *Lo*, and therefore its size remains constant between its reception from the first domain and its transmission on the second domain. This is plain from the fact that *Lo* aims at transferring the same data payload whatever the protocol (e.g. IEEE 1394 and Ethernet, col. 8, lines 12-46).

It is further specified at col. 9, lines 18-25, that after the assembling of a new data packet, the data within the data payload 324 is automatically accessed and broadcast over the second communication domain (bus).

Thus, in *Lo* there are no conditions for reformatting digital information received within the bridge circuit nor for transmitting such information over second communication domain and there is no operation of (nor any means for) determining at least a need to reformat received digital information having a first format according to resources available on second communication domain.

Further, in *Lo* there is no operation of (nor any means for) determining a bandwidth allocation on the second communication channel in order to provide a minimum service of reformatting the received digital information.

In addition, in the method of Claim 1, the output data format (second data format) is not predetermined but is selected among a plurality of second data formats (e.g. DV, MPEG2, JPEG 2000 ...). *Lo* contains no mention of any such feature.

Next, in the method of Claim 1, the reformat operation of reformatting the received digital information into digital information having a second format selected from a plurality of second data formats is performed if two conditions are met: determination of a need to reformat (see above) and determination of a bandwidth allocation (see above), *Lo* does not even hint at such specific conditions for reformatting.

Applicant notes that the Examiner admits that *Lo* does not disclose the resource allocation. However, in contrast with the Examiner's view, it is Applicant's strong view that such a resource allocation is not known in the art.

As a matter of fact, the Examiner overlooked the specific conditions under which the resource allocation is made and which are stated above; determination of a need and of a bandwidth allocation for a minimum service of reformatting and reformat according to the determined need and bandwidth allocation.

Even if it were, for argument's sake, considered obvious that a need to reformat be determined (according to the Examiner), nevertheless this need would then be determined only on the basis of information concerning the source or the destination node but not on the resources available on the second channel, such as the bandwidth. For these reasons, Applicant finds himself entirely unable to accept the Examiner's view on this point. IN any event, should the Examiner maintain his view on this in his next action, it is respectfully

requested that the Examiner provide a specific citation to such in the prior art.

Ludtke relates to a media manager that manages the flow and data conversion between devices in a network. In the event that the source and destination devices involve different data types, the system in *Ludtke* will handle automatic or requested data translation using the service of the data format manager (col. 10, lines 61-66). In particular, the system only analyzes the input data formats for the source and the destination nodes in order to determine if a conversion is necessary (col. 3, lines 21-35 and col. 11, lines 45-55). However, this condition for performing a conversion does not take into account any resources, e.g. bandwidth, on the second communication channel, which is contrary to the method of Claim 1.

In *Ludtke*, there is neither any disclosure of a bandwidth allocation, nor the determination of a bandwidth allocation in order to provide a minimum service of reformatting the received digital information.

Thus, in the *Ludtke* system there is no selection of a second format among a plurality of second data formats for converting data, this second format being selected in accordance with the result of determination of both a need to reformat made on resources available on the second channel and the above-mentioned bandwidth allocation.

As a matter of fact, in *Ludtke* the data formats are predetermined on the basis of data formats used in the source and destination nodes only.

Thus, the above documents either disclose that a conversion of data is made automatically only on the header of data packets or according to input data formats for source and destination devices <u>but not</u> according to resources available on the second communication

channel, as recited in Claim 1. For all these reasons, the above-mentioned documents, taken separately or in any possible combination (assuming for argument's sake that such a combination would be a permissible one), fail to teach all the features recited in independent Claim 1. Further, there is no hint nor any suggestion that would conceivably suffice for one of ordinary skill in the art to reach the method of Claim 1 by somehow combining these two patents, not least because even if one of ordinary skill would have been led to attempt such a combination, the result of such combination would still not include all features recited in Claim 1.

Independent Claim 17 is directed to a bridge that has elements that perform functions sufficiently similar to the steps of Claim 1 that the foregoing arguments apply to Claim 17 as well.

A review of the other art of record, including *Tanno*, has not revealed anything that in Applicant's opinion would supply what is missing form the documents discussed above as prior art against the independent claims herein. Accordingly, those claims are believed to be clearly allowable over all the art of record.

The other claims not yet allowed in this application depend from one or the other of the independent claims discussed above and, therefore, are submitted to be patentable for at least the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, individual consideration or reconsideration, as the case may be, of the patentability of each claim on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.

Applicant's undersigned attorney may be reached in our New York Office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address listed below.

Respectfully submitted,

Leonard P. Diana
Attorney for Applicant
Registration No. 29,296

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200

NY_MAIN 474536v1